ADDITIONAL GUIDANCE FOR ATTACHMENTS 3C AND 3D

Applicants may use any of the three methods below to document community median household income (MHI) and population. MHI and population can be provided based on the City or Census Designated Place (see Option A below), the School District boundary (see Option B below), or if appropriate, the individual school boundary (see Option C below). Follow instructions below regarding what information to include as Attachments 3C and 3D.

ATTACHMENTS 3C & 3D – MEDIAN HOUSEHOLD INCOME & POPULATION

A. MHI AND POPULATION DETERMINATION USING CITIES AND CENSUS DESIGNATED PLACES (CDPs)

For communities that are cities or recognized as census designated places, American Community Survey (ACS) population and MHI estimates are available using American FactFinder.

1. Visit the American FactFinder website at: http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml
2. Enter a city, unincorporated community, in the community facts search box and click on go.
3. Click on income on the left side of the screen and the annual MHI for that area will be displayed.
4. Print the page and provide as Attachment 3C. Please also use this MHI on your application.
5. If this Procedure produces a representative MHI determination for the community, then you are done. *If you do not believe the MHI may be representative, you may evaluate using one of the other procedures below*.
6. Click on Population on the left side of the screen and the population for the community will be displayed.
7. Print the page and provide as Attachment 3D. Please also use this population on your application.

B. MHI AND POPULATION DETERMINATION USING SCHOOL DISTRICT BOUNDARIES

The National Center for Education Statistics (NCES) collaborates with the Census Bureau and uses ACS data to create a variety of data products for school districts. Estimates for MHI and population are available online through NCES' Education Demographic and Geographic Estimates (EDGE) program. Applicants should follow the procedure below to access and report this data.

1. Visit http://nces.ed.gov/programs/edge/demographicACS.aspx
2. Scroll down and click the Detailed Table for 2011-2015 under Total Population (lower left box)
3. Select "School District" in the dropdown menu for Geography Type and "California" for State
4. Select the school district of interest using the dropdown menu
5. Type "Median Household Income" in the search bar
6. Click on [B19013] MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2014 INFLATION-ADJUSTED DOLLARS) (It should be the first search result)
7. Print the estimate in the resulting Table Preview to attach to your application as Attachment 3C**.**
8. Go back to the search bar and type "Total Population"

9. Click on [B01003] TOTAL POPULATION (It should be the first search result)
10. Record the Estimate in the resulting Table Preview and attach it to your application as Attachment 3D

C. MHI AND POPULATION DETERMINATION USING INDIVIDUAL SCHOOL BOUNDARIES

This method requires ArcGIS or similar and experience with this type of computing software. Contact the Division for further guidance. **NOTE: applicants utilizing this method will not be eligible for the funding prioritization for projects benefiting municipalities that are small DACs.**

Layers are denoted with a border. ArcGIS commands are denoted in **bold face.**

1. Download the file geodatabase MHI_Map_Layers.gdb here.
2. Add the layer Block_Groups_2015 into ArcMap: **Add Data…**
3. Draw the individual school boundary in ArcMap:
    a. If a GIS file of the boundary is available, import the file and trace around the boundaries
    b. If a GIS file is not available, it will be helpful to turn on certain layers. For example, School Districts, Counties, Roads, or other layers available from ArcGIS online. Turn on labels: Right click layer → **Label Features**
    c. Go to **Customize** → **Toolbars** → **Draw** to turn on the Draw toolbar
    d. Select the **Polygon** tool on the toolbar  (rectangle is usually the default)
    e. Draw the school boundaries by tracing or following landmarks
    f. Add the resulting shapefile as a layer: **Drawing** → **Convert Graphics to Features** in the Draw toolbar
    g. Click the box to automatically delete graphics after conversion
    h. Save the output as BOUNDARY.shp
    i. When prompted, click YES to add the exported data to the map as a layer
4. Create a new layer and attribute table:
    a. Intersect the BOUNDARY.shp layer and Block_Groups_2015: **Geoprocessing** → **Intersect**
    b. Use both the drawn layer and block groups as the inputs. Save the output as NEW but don't select a new location (this can cause the intersect tool not to work)
    c. Remove BOUNDARY to avoid confusion: right click → **Remove**
    d. Join NEW to Block_Groups_2015: right click on NEW → **Joins and Relates** → **Join…**
    e. Base the join on field GEOID, and keep all records.
5. Calculate a spatially-weighted Population Estimate per the instructions below:
    a. Open the attribute table of NEW: Right Click → **Open Attribute Table**
    b. Add a field: **Table Options** → **Add Field…** name it Pop_Est
    c. For **Type:** select Double, click OK
    d. Right click the column heading of Pop_Est → **Field Calculator…** click Yes if asked if you wish to continue
    e. Calculate: ([NEW.Shape_Area]/ [Block_Groups_2015.Shape_Area])

f. If a column of 1s is returned, there is likely an error. No values should exceed 1.
g. Finish the calculation: Right click the column heading of Pop_Est → **Field Calculator…**
h. Calculate: ([NEW.Shape_Area]/ [Block_Groups_2015.Shape_Area]) * [Block_Groups_2015.ACS_Pop]
i. Right click the column heading of NEW.Pop_Est, select **Statistics…**
j. Record the Sum. This is the spatially weighted Population Estimate. Attach a map and supporting documentation to your application as Attachment 3D.

6. Calculate a population-weighted MHI Estimate per the instructions below:
    a. Open the attribute table of NEW: Right Click, **Open Attribute Table**
    b. Add a field: **Table Options** → **Add Field…** name it MHI_Est
    c. For **Type:** select Double, click OK
    d. Right click the column heading MHI_Est, select **Field Calculator…**
    e. Calculate: ([NEW.Pop_Est] / (Sum from step j above)) * [Block_Groups_2015.ACS_MHI]
    f. Right click NEW.MHI_Est, select **Statistics…**
    g. Record the Sum. This is the population-weighted MHI Estimate. Attach a map and supporting documentation to your application as Attachment 3C.